Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)
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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional): 1176/220

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on July 24, 2006

Signature: [signature]

Typed or printed name: WEN LIU

Application Number	Filed
10/799,502	March 11, 2006

First Named Inventor: Chang, Yi-Hui

Art Unit	Examiner
2871	Chowdhury, Tarifur R.

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

- ☐ applicant/inventor.
- ☐ assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
- ☒ attorney or agent of record. Registration number 32,822
- ☐ attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____

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July 24, 2006
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

PATENT
Docket No.: 1176/220

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Wen Liu

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of: Chang, Yi-Hui Serial No.: 10/799,502 Filing Date: March 11, 2004 For: LIGHT COUPLING STRUCTURE ON LIGHT GUIDE PLATE IN A BACKLIGHT MODULE (as previously amended)	Examiner: Chowdhury, Tarifur Rashid Group Art Unit: 2871 **EXPEDITED PROCEDURE**

ARGUMENTS IN SUPPORT OF PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicant presented detailed arguments in the earlier response to the Final Action filed on June 22, 2006, which arguments are fully incorporated by reference herein. Applicant herein emphasizes some of those arguments, provides additional arguments, and responds to the Examiner's comments in the Advisory Action.

I. Summary of the Invention

The present invention comprises a two-dimensional array of protruding or convex structures that extend from a planar surface of a light guide plate, wherein each convex structure is aligned with a point light source (i.e., a two dimensional array of point light sources). The convex or protruding structures more effectively diffuse the light from the point light source into (not from) the light guide plate, to achieve a more uniform output light distribution across the entire light emitting surface on the opposite side of the light guide plate. In a further embodiment, the convex structure has a recess within the convex structure. In the context of an LCD device, an LCD panel is positioned relative to the light emitting surface of the light guide plate in the backlight device, with the light source at the opposite planar surface of the light guide plate.

II. Claim Rejections Under 35 USC 102(e) (Chuang)

Applicant argued in the response to the Final Action that Chuang does not disclose convex structures on its light guide plate, in the context of the term "convex" or "protrusion" as used herein. The Examiner commented in the Advisory Action, that "even though the claims are read in light of the specification, the specification is not necessarily read into the claims." The Examiner went on to reference dictionary meanings of the terms "convex" and "protrusion". Applicant respectfully submits that the Examiner erred by construing the claims out of context of the specification, and impermissibly read the dictionary meanings into the claims. The Examiner's reliance on extrinsic dictionary meanings is improper in the first place.

To properly construe the terms of a claim, reference must be first made to the intrinsic evidence (i.e., the patent specification, the prosecution history, and the claims in the patent, and when appropriate, to extrinsic evidence that may assist in determining the proper construction. (*See, Markman*, 52 F.3d at 979-981; Extrinsic evidence consists of all evidence that is external to the patent and file history, including ... dictionaries....) Terms in the claims are given their ordinary meaning unless it is established that the inventor disclosed a different meaning. (*See, Mendenhall v. Cedarapids, Inc.*, 5 F.3d 1557, 1578 (Fed. Cir. 1993), *cert. denied*, 114 S. Ct. 1540 (1994).) An inventor may be his own lexicographer by giving special meaning to terms used in the patent claims. Such an inventor-defined term, however, must be described in the patent specification. (*See, Markman, supra.*) Claims must be read in view of the specification, which is "highly relevant to the claim construction analysis" because it contains a written description of the invention that must be clear and complete enough to enable those of ordinary skill in the art to make and use it. "Usually, [the specification] is dispositive; it is the single best guide to the meaning of disputed term." (*See, Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).) The specification also acts as a restriction on claim scope in that a claim cannot be construed to have a broader scope than supportable by the written description. (*See, Scimed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc.*, 242 F.3d 1337, 1341 (Fed. Cir. 2001); *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473, 1480 (Fed. Cir. 1998); "[C]laims may be no broader than the supporting disclosure, and therefore . . . a narrow disclosure will limit claim breadth.")

Further, the Federal Circuit has recently affirmed the basic principles of claim construction, including the extent to which the court should resort to and rely on a patent's specification in

seeking to ascertain the proper scope of its claims. (*See, Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005).) Importantly, a person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification. The Federal Circuit recognized that it and the Supreme Court have long emphasized the importance of the specification in claim construction. Therefore, the Federal Circuit held, it is entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of the claims.

Following the authorities set forth by the courts, Applicant is entitled to be its own lexicographer, in adopting a consistent usage of the term "convex" that is supported by the specification, which should have been reasonably interpreted in the context of the specification. The specification consistently adopts "convex" to refer to a structure that extends from the "first surface" of the light guide plate. Chuang instead discloses recesses that are concave structures on a light guide plate, based on a reasonable interpretation, and within the context of the disclosure of the present invention. It is further noted that in the further disclosed embodiment shown in Fig. 5b of the disclosure of the present invention, the convex structure includes a recess within such structure. This demonstrates that the distinction between a convex structure and a recess structure is clear and consistently presented in the disclosure of the present invention. Further, there is no support in the specification of the present invention of a "convex structure" that is a recess only structure in the absence of a protruded or convex structure. Therefore the term "convex structure" may not be reasonably construed to mean a recess structure, which would have been a concave structure as opposed to a convex structure.

Concerning claim 51, the Examiner adopted certain dictionary meaning to interprete "protrusion" as "to thrust forward". This interpretation actually supports Applicant's arguments! Claim 51 specifically recites a two dimensional array of "protrusions" on the "first surface", each protrusion aligning with a pointed light source. Chuang instead discloses recesses from the surface of a light guide plate, which recesses do not "thrust forward" in the form of "protrusions", either according to the dictionary meaning adopted by the Examiner, or in the context disclosed by the disclosure of the present invention.

Accordingly, independent claims 27 and 51 are not anticipated by Chuang for failure to disclose a "convex structure" (claim 27) or "protrusions" (claim 51).

III. Claim Rejections Under 35 USC 103(a) (Funamoto + Yokoyama + Cho)

Funamoto does not disclose a two-dimensional array of point light sources, and further does not disclose convex structures aligned with point light sources. Funamoto is directed to a light guide that is designed for top illumination of the front face of an illuminated object (see Abstract in Funamoto), as opposed to a backlight light guide. The illuminated object is viewed through the light guide plate. Consequently, the light source in Funamoto cannot be on any of the planar side (versus the edges) of the light guide plate, which would block the view of the object. The light entering the edge of the light guide is projected onto the liquid crystal panel via projections on the undersurface of the light guide which faces the liquid crystal panel, as compared to the claimed invention in which the surface having the convex structures is facing the light source (i.e., the light emitting surface face away from the light source, given that the present invention is directed to a backlight device).

The Examiner however asserted in the Advisory Action that Funamoto also discloses the use of the light guide as a backlight device for transmission type liquid crystal devices, citing certain sections in Funamoto (sections [0139], [0165], and [0183]). The Examiner misconstrued Funamoto. Contrary to the Examiner's allegation, these cited sections in fact teaches away from a backlight device. These sections all compared the advantages of the Funamoto top illuminated structures to the disadvantages of the conventional backlight devices, in that light from a backlight device passes through the liquid crystal panel once only, whereas light from a top illuminated device passes through the liquid crystal panel one more time since the such light is reflected by the reflecting plate after once passing through the liquid crystal display panel. Funamoto specifically and consistently emphasized in Sections [0139], [0165], and [0183], that this is beneficial in obtaining higher recognizability, since contrast is increased. As such, Funamoto specifically teaches away from adopting backlight illumination for its invention. The Examiner cannot and should not ignore the specific teaching of this reference, in an obviousness inquiry.

With respect to Yokoyama, it is directed instead to a light source device that guides rear illumination using reflective light guides (instead of transmissive light guides in which light passes through the body of the light guides, as in Funamoto) towards a liquid crystal panel in an LCD projector. The Examiner noted in the Advisory Action that the provision of illumination in an LCD projector "is not relevant" (presumably to the obviousness rejection). The Examiner appears to have conveniently ignored the disclosure of the references (as a whole, and even individually), with

impermissible application of hindsight to determine what is relevant or not relevant. Yokoyama is directed to a completely different, non-analogous, structure compared to Funamoto (a reflective light guide versus a transmissive light guide), and Funamoto effectively teaches away from using a two-dimensional array of point light sources, since its objective is to provide a thin light guide structure, using a linear array of light sources at a thin edge of its light guide plate.

With respect to Cho, as noted above, there is no motivation or desirability to modify Funamoto, which can be gleamed from Funamoto, or Cho, or any other references for that matter, to have point light sources on either planar side of the Funamoto light guide plate.

The Examiner stated in the Advisory Action that "the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious." While this statement may be accurate in the abstract, but the Examiner clearly ignored an important component of this statement – "suggestion of the prior art". As demonstrated above and in Applicant's earlier response to the Final Action, "suggestion of the prior art" is missing in relation to the present invention. Absent such suggestion, nothing could naturally flow from the prior art, but instead must require non-obvious inventive steps leading to the present invention. It appeared that the Examiner relied upon cherry picked individual structures in the cited references to create the present invention based on impermissible hindsight reconstruction, completely disregarding the fact that the references themselves do not teach or suggest, and in fact teach or suggest against, the combination proposed by the Examiner.

Accordingly, Claims 27-52 are therefore not rendered obvious by Funamoto in view of Yokoyama and Cho.

Respectfully submitted,

Dated: July 24, 2006

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